Greenfield Complete Streets Prioritization Plan

January 30, 2017

PLANNING + DESIGN

Goals for Public Meeting

- Overview of MassDOT Complete Streets Funding Program
- Educate the community on Complete Streets design elements
- Gather your feedback to help consultant team better understand needed improvements

MassDOT CS Funding Program

- **Tier 1** – Adoption of Complete Streets Policy
- **Tier 2** – Development of Complete Streets Prioritization Plan – up to $50,000 available for each participating community
- **Tier 3** – Project Approval and Notice to Proceed for installation or construction – up to $400,000 available for participating community

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What is a Complete Street?

A Complete Street is safe, comfortable and convenient for travel via foot, bicycle, transit and automobile for anyone regardless of age or ability.

alta PLANNING + DESIGN

WA

Context Matters

Davis St. looking south from Norwood

Suburban/ Small Town

Urban

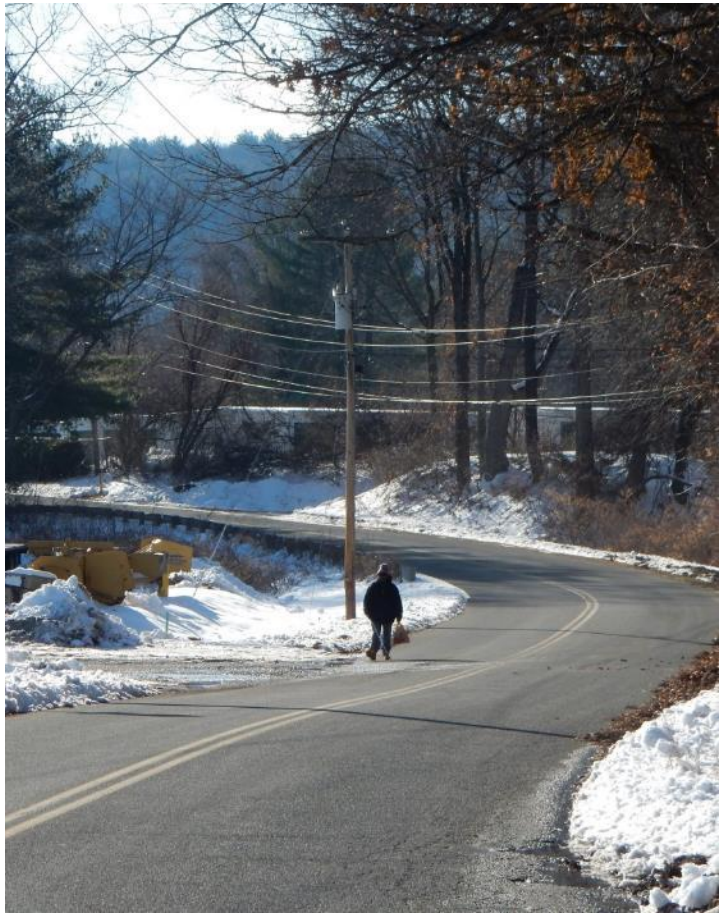
Rural

Main St. looking east

Colrain St. at the Green River bridge

Why do we need Complete Streets?

- **54%** of **older** Americans say that they would like to walk/bike more often
- **1/3 of all Americans do not drive** because of age, ability or economic status
- Mitigate impacts of climate change and **reduce harmful air pollution**
- Complete streets **reduce isolation** and dependence



Source: America Bikes web site

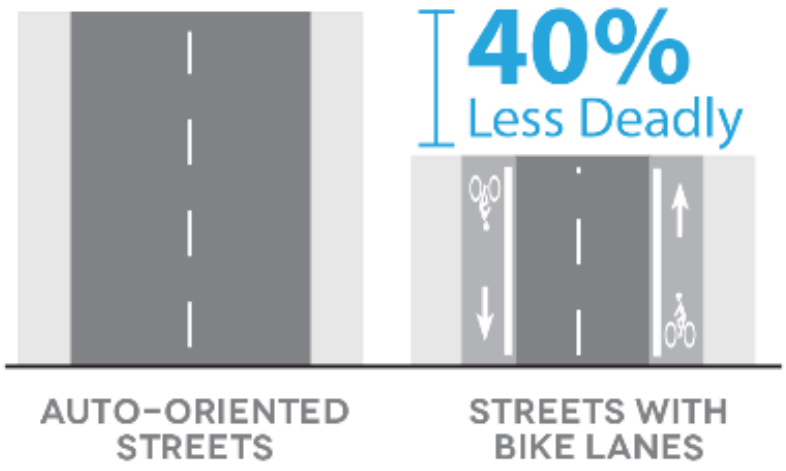
Complete Streets are Safe Streets

Percentage Fewer Crashes

PEDESTRIANS

- ↓ 88% with sidewalks
- ↓ 69% with hybrid beacon
- ↓ 39% with medians
- ↓ 29% with road DIETS

BICYCLISTS



Source: National Complete Streets Coalition and FHWA

Source: NYC DOT (2010) The New York City Pedestrian Safety Study & Action Plan.

Complete Streets increase roadway capacity

Photos: Tampa Tribune
From National Complete Streets Coalition

Complete Streets Toolbox

MassDOT Eligible Complete Streets Infrastructure

A. Pedestrian Facilities

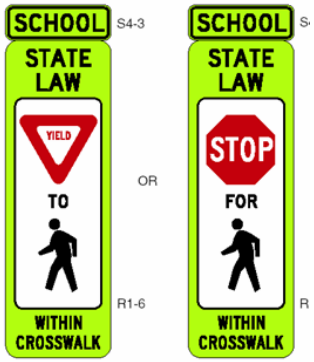
B. Bicycle Facilities

C. Traffic + Safety

D. Transit Facilities

A. Pedestrian Facilities

- Focus first on easy-to-implement and **low cost** solutions, but…

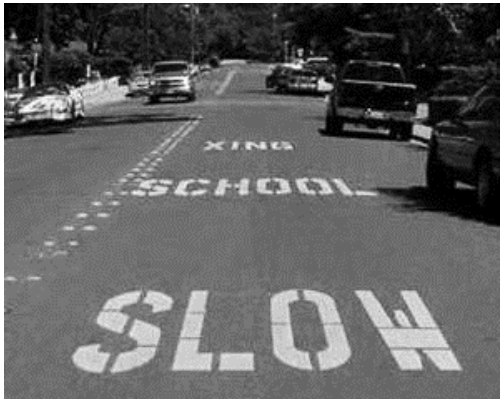


- …plan for **long term** improvements that may require state and federal funding

Source: www.completestreets.org

A. Pedestrian Facilities: Low Cost

- Pavement markings
- In-street pedestrian signs
- Signage
- Removing obstacles
- Modifying traffic signal equipment



A. Pedestrian Facilities: Long Term

1. Sidewalks
2. Intersections/ Crossings
3. ADA Accessibility
4. Trails

A1. Sidewalks

- Minimum width: 4 feet
- Recommended width:
  - 5 – 8 feet on side streets
  - 10 – 15 feet in business districts
- Well connected, form a network
- Accommodate desire lines

A1. Sidewalks

Prioritize pedestrians, not vehicle traffic, at driveways and street crossings

A2. Intersections/Crossings

New Traffic Signals and Equipment

- Pedestrian push buttons
- Count-down signals and Lead Pedestrian Interval (LPI) of 3 or 5 seconds

A2. Intersections/Crossings

Reduce Crossing Distance with Curb Extensions

- Extends into roadway to shorten exposure time
- Improves visibility, especially for children
- Creates visual pinch points to slow traffic

A2. Intersections/Crossings

Reduce Crossing Distance with Refuge Islands

- Shortens exposure time
- Provides a safe refuge between directions of vehicle travel
- Creates visual pinch points to slow traffic

A3. ADA: Good Design for All

- 20% of Americans have a disability that limits their daily activities
- Complete Streets feature curb cuts, high visibility crosswalks, and other designs for travelers with disabilities

Existing condition at Chapman and Pleasant Streets

A4. Trails

- Intended for use by pedestrians, bicyclists, other non-motorized users
- Width: 8’-12’ paved
- Roadway separation: 5’ minimum
- Trails are the most desirable facility along busy roadways

B. Bicycle Facilities

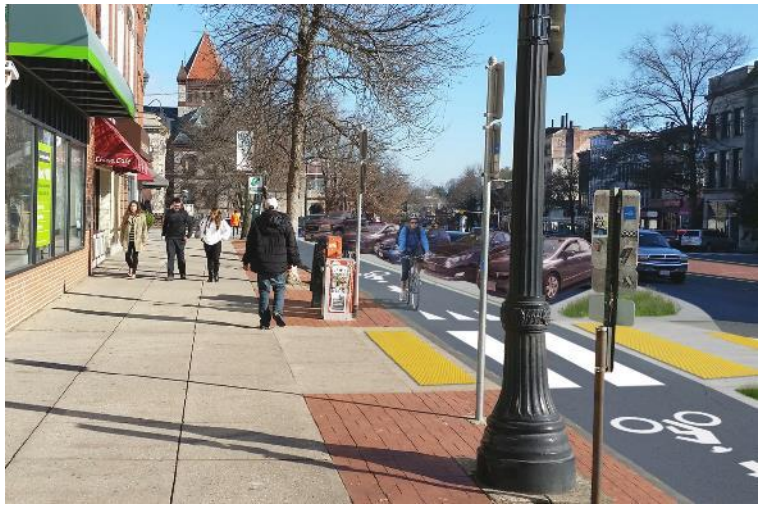
1. Separated bike lanes (aka cycle tracks)
2. Neighborhood bikeways
3. Standard bike lanes
4. Intersection treatment
5. Shared roadways

B1. Separated Bike Lanes

- Roadway grade cycle tracks (one way or two way traffic)

Broadway cycle track, Seattle

- Sidewalk grade cycle tracks



Main Street proposed, Northampton

B2. Neighborhood Bikeways

- Traffic diverters
- Traffic calming
- Branding

B3. Standard Bike Lanes

B4. Intersection Treatment

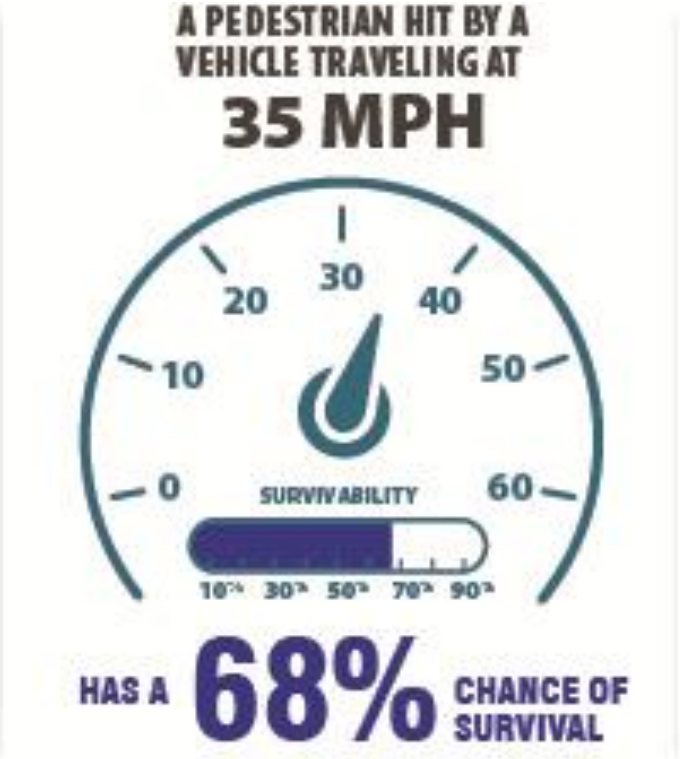
- Bike lane skip striping for guidance
- Green bike lanes
- Bicycle signals
- Bike Boxes
- Two-stage left-turn queue boxes

B5. Shared Roadways

- Shared lane markings
- Enhanced shared lane markings
- Signed routes

C. Traffic and Safety

A pedestrian's chance of death if hit by a motor vehicle reduces dramatically for every 10 MPH in speed dropped



Tefft, B. C. Impact speed and a pedestrian's risk of severe injury or death. Accident Analysis & Prevention 60 (2013) 871-878.

C. Traffic and Safety

Narrow travel lanes

15’ travel lane along 2A / Main St

23’ travel lane at Mill Street intersection with Bank Row

20’ travel lane along Main St by Conway St

>42’ between parking at Court Sq

C. Traffic and Safety

Raised crossings

Raised crosswalk at Keene State College

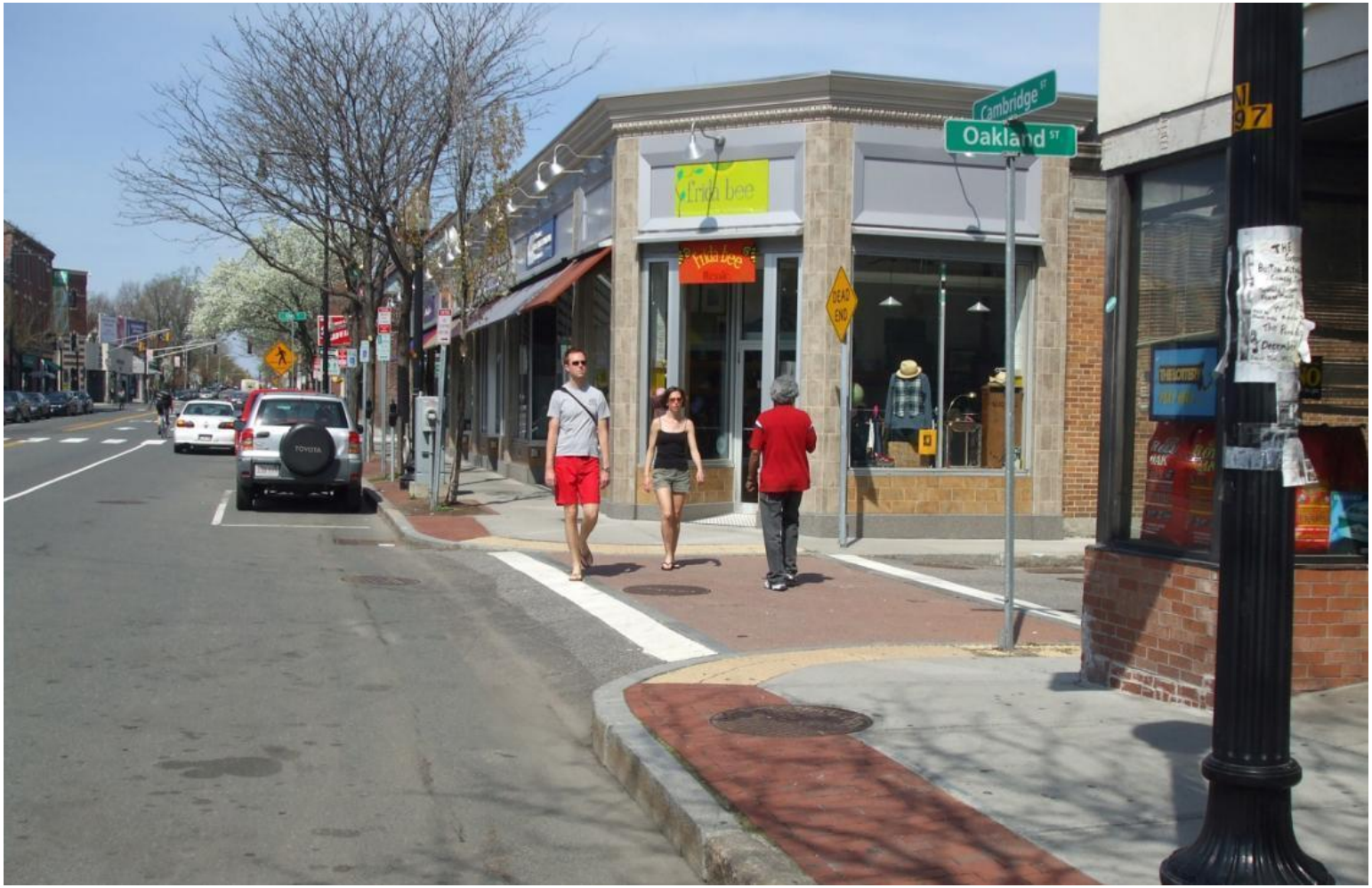
C. Traffic and Safety

Large turning radii increases speeding

Source: www.completestreets.org

C. Traffic and Safety

Slower traffic with tight turning radius and raised crossing



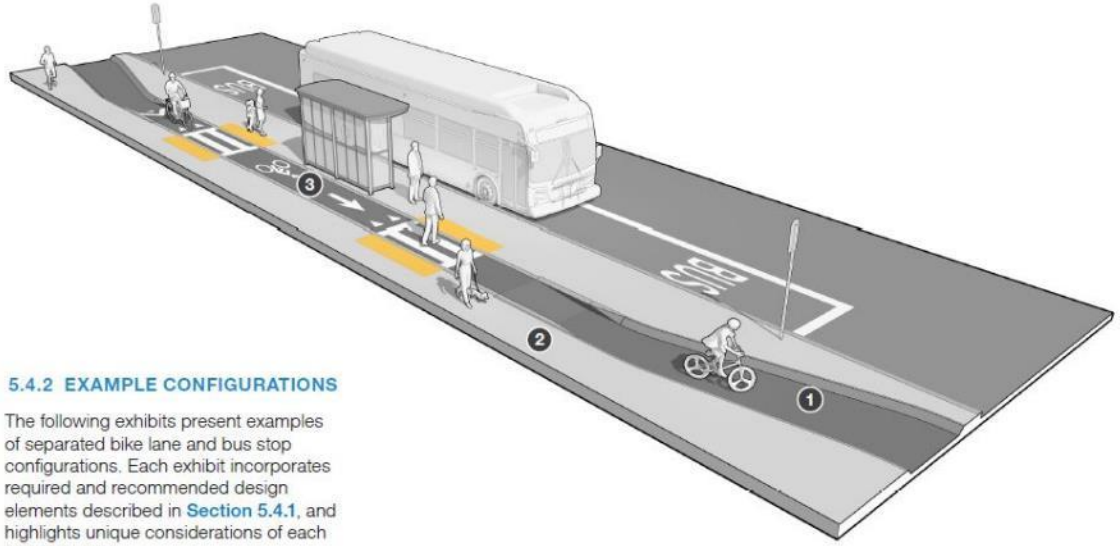
D. Transit Facilities

- Nearly every transit trip begins as a walking trip
- Ideal multi-modal nodes include rail and bus service, quality bike parking and sidewalks

D. Transit Facilities

- Safe and comfortable transit stations and shelters that are connected by a well established sidewalk and bicycle network reduce barriers to transit use for everyone

EXHIBIT 5I: FLOATING BUS STOP (MID-BLOCK)



5.4.2 EXAMPLE CONFIGURATIONS

The following exhibits present examples of separated bike lane and bus stop configurations. Each exhibit incorporates required and recommended design elements described in Section 5.4.1, and highlights unique considerations of each configuration.

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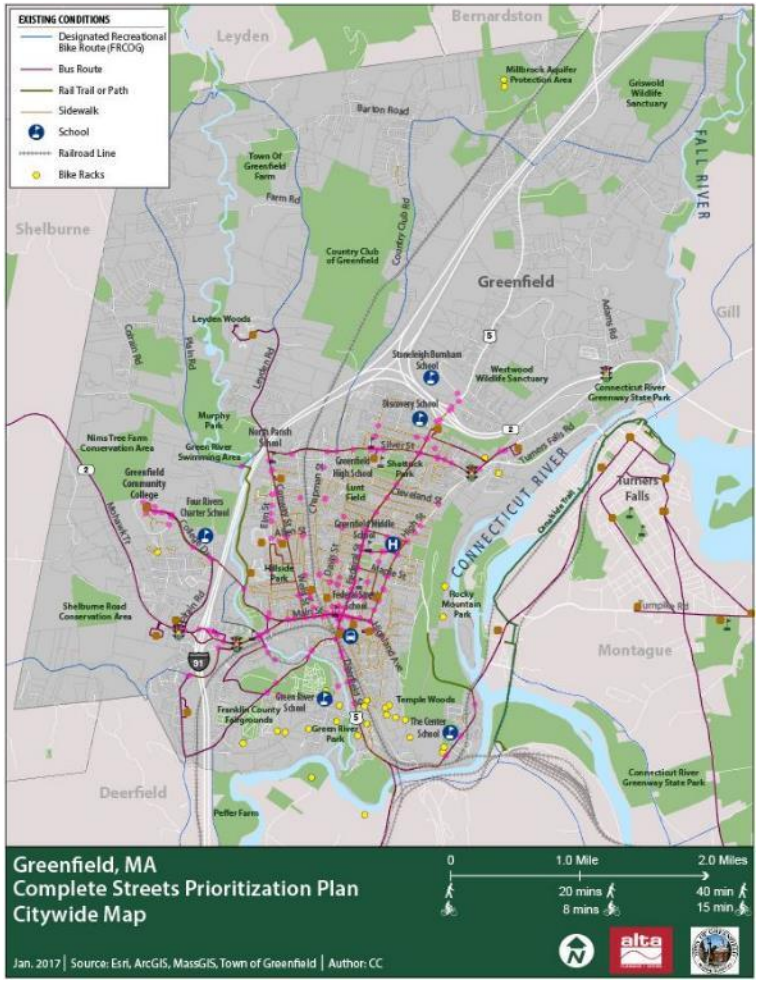
Break out groups

- 1. City-wide maps



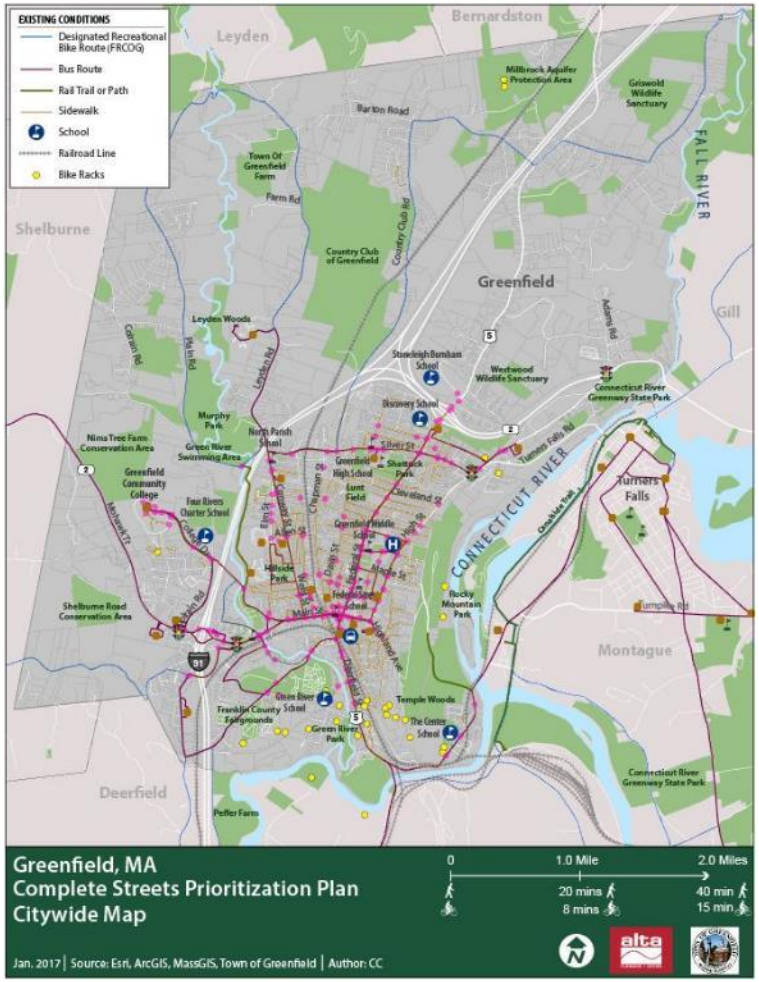
- 2. Downtown-inset maps

Small Group Prompts

1. What are the critical gaps in the current sidewalk and on-street bicycle network within Greenfield?
2. Are there gaps in the sidewalk network in your neighborhood, near your school or workplace?
3. What challenges do you face when walking/biking to and from downtown?
4. What facility improvements would enhance public transit in Greenfield?

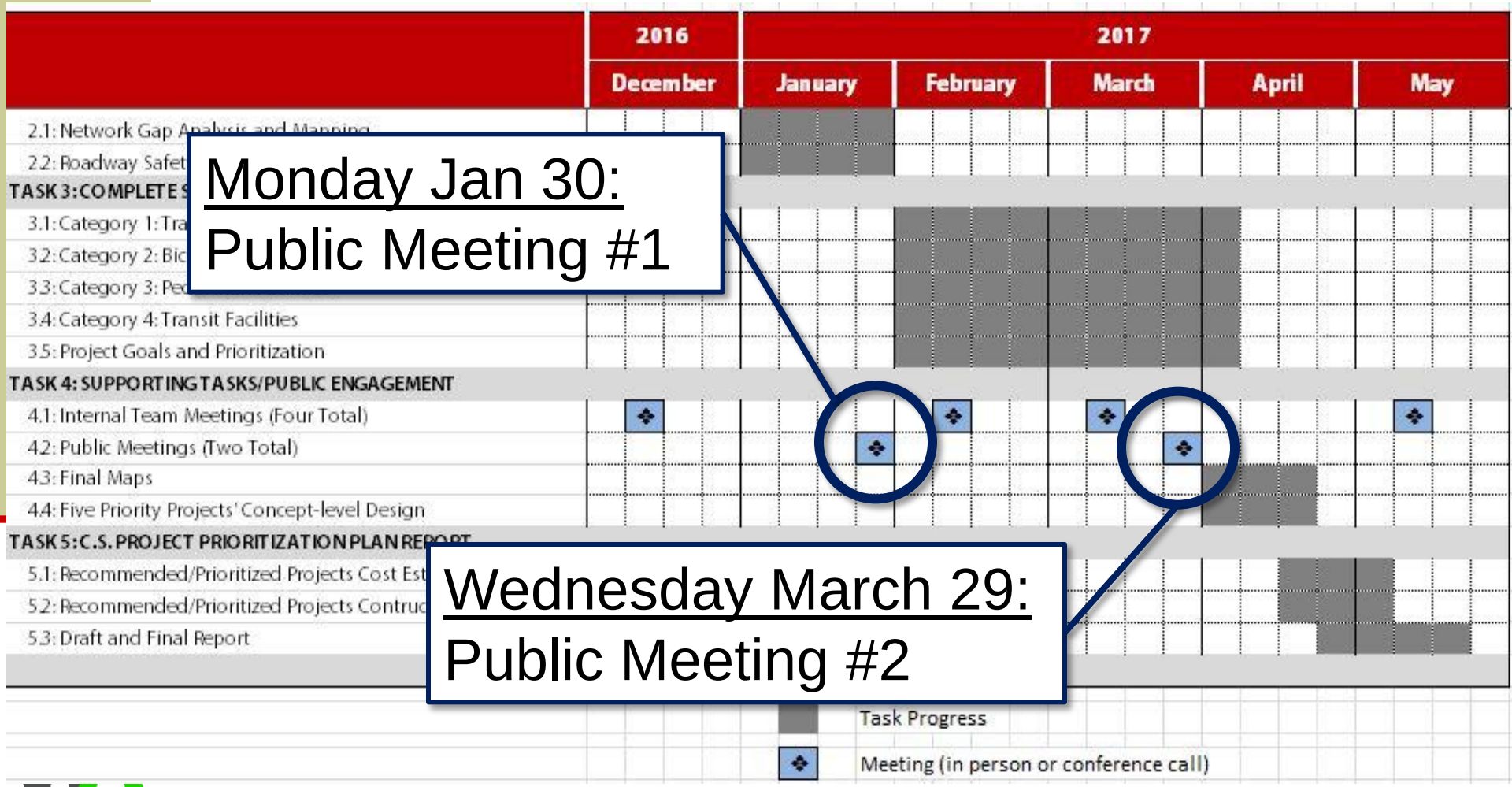
Reports Back

- 1. City-wide maps



- 2. Downtown-inset maps

Next Steps



Monday Jan 30:
Public Meeting #1

Wednesday March 29:
Public Meeting #2

THANK YOU!

http://greenfield-ma.gov/n/142/Press-Release---Greenfield-Complete-Streets-Prioritization-Plan

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